

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Docket No.: JOHN

In re Application of:)	
DETLEF JOHN & STEFAN BUTENKEMPER)	Examiner: Muromoto Jr. R.
)	Group Art Unit: 3765
Appl. No.: 10/700,012)	Confirmation No: 3679
Filing Date: November 3, 2003)	
For: WIRE CLOTH)	

DECLARATION UNDER 37 C.F.R. 1.132

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SIR:

I, WALTER HAVER, citizen of Germany declare as follows:
THAT I have an engineering degree from a Technical University in Germany;
THAT I am a member of the German Association of Wire Weavers VDD (Verband Deutscher Drahtwebereien), of the European Association of Wire Weavers BITOM (Bureau international d'information pour les toiles métalliques), of the American Wire Cloth Institute, and Chairman of the Standards Committee ISO TC – 24 "Sieves, Sieving and other Sizing Methods";
THAT I am a Personally Liable Executive Secretary of Haver & Boecker, Carl-Haver-Platz, 59302 Oelde, Germany (hereinafter "the Company");

THAT I have carefully read the U.S. Patent application for Letters Patent, Appl. No: 10/700,012, entitled "Wire Cloth" (hereinafter "the Application"), and the Official Action dated May 25, 2006 relating to the Application and rejecting all claims on file under 35 U.S.C. 103(a) as being unpatentable over by U.S. Pat. No. 3,049,796 in view of U.S. Pat. No. 3,143,150, and make the following sworn statement:

One production line of the Company relates to wire weaving mill. In addition, the Company owns the subsidiary company W.S. Tyler, 8517 Tyler Blvd., Mentor, Ohio 44060, USA. The Company and W.S. Tyler manufacture, among other items, also filter cloths which employ the most up-to-date screening technology and are distributed worldwide.

It has been known for decades, to calender in a subsequent operation a wire cloth produced with a weaving loom. The woven wire cloth is hereby moved through the roller gap between at least two calender rollers. The size of this roller gap in these calender machines can be adjusted, so that same pressing forces are applied on both sides to the moving wire cloth. These pressing forces cause a plastic deformation of both the warp wires and the weft wires. The thickness of the warp wires and weft wires remains the same, even if the warp wires and weft wires of the untreated fabric differ. The pressing forces applied upon the warp wires and weft wires reduce the size of the pores, bounded by the intersecting warp wires and weft wires, in dependence on the degree of deformation of the warp wires and the weft wires. In this way, the particle size of the particles to be filtered out can be varied.

As also described in U.S. Pat. No. 3,049,796, which issued in 1962, it is absolutely essential to stabilize the wire cloth after calendering by thermal treatment or sintering.

Care has to be taken during the weaving process that the weft wires are only subjected to tensile forces which result solely in an elastic deformation of the wires. This view is still promoted today by the experts.

These wire cloths or filter cloths are produced in three process steps,

namely weaving, calendering, and thermal treatment or sintering. Accordingly, three correspondingly constructed facilities with suitable machinery are required, or a facility would have to be constructed in which the individual stations for the three process steps are integrated. This requires a design of considerable complexity, so that accordingly the production costs for the wire cloth or filter cloth are very high.

The Company has moved away from this technology and has searched for a production process to achieve pore sizes in wire cloths or filter cloths which could previously only be attained through calendering. The goal was also to significantly reduce the complexity of a production facility for such as wire cloth.

The Company has now moved away from the concept that the forces applied to the weft wires should only result in an elastic deformation. The Company has recognized that weft wires can be easily pulled through same or through smaller spacings between the warp threads, because it has been unexpectedly and surprisingly determined that this results in a contraction. The diameters of the warp wires can hereby in the final state deviate from the non-contracted diameters of the weft wires, allowing variation of the pore size. In the filter cloth according to the Application, only the weft threads are plastically deformed in the region where they intersect with the warp threads. The size of the pores is therefore determined in accordance with the diameters of the warp and weft threads and the attained contraction.

Thus, the same results can be achieved with a wire cloth according to the Application than with a filter cloth made through calendering and subsequent thermal treatment; However, the wire cloth according to the Application is produced by a single process step and exclusively by using a weaving loom. The regions where the warp and weft threads intersect are formfittingly connected by way of the contractions, resulting in a same effect achieved heretofore by a final thermal treatment of the calendered cloth.

The wire cloth or filter cloth according to the Application has received a lot of attention in the art. Frequent inquiries have been received by the Company

regarding the know-how for the weaving process for the wire cloth. This wire cloth represents a significant progress in the weaving technology of a wire cloths.

Date: Nov, 21, 2006

G. Haever

WALTER HAVER